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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,283	03/04/2002	Theodore L. Wolf	DYC-10-5598	6591

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EXAMINER	
SAETHER, FLEMMING	

ART UNIT	PAPER NUMBER
3679	

DATE MAILED: 12/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/090,283	WOLF ET AL.	
	Examiner	Art Unit	
	Flemming Saether	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Peri d for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 October 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Claim R jections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hollinger (US 3,316,952). Hollinger discloses a locknut and method comprising a body (11) having a threaded bore (14) with its length about equal to its diameter and an aperture (16) formed at the top end of the body including a plurality of forged splines elements (19') extending form a top surface of the body to an actuating wall (15) which is provided at an angle relative thereto. The splines having an engagement edge with adjacent splines separated by a void. A deformable locking member (17) having an inner surface larger than the threaded bore and an outer surface engaged by the splines (column 3, lines 46-51) which inherently would include the engagement edge. The volume of the deformable locking member being greater than that of the aperture such that as the nut is tightened on a threaded rod, the deformable member is forced to flow against the threaded rod and an engaging surface (Figs. 5 and 6) which would provide both a sealing and a protection against loosening such as would be caused by vibration. At the nut body is further tightened or backed off the threaded rod the forces applied against the deformable member increase and reduce respectively. The forging is a product-by-process limitation wherein it is only the final product considered for

patentability. Indeed, the structure of the splines as shown in Hollinger includes the desirable characteristics of forged splines as disclosed by applicant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-7 and 9-19 (some alternatively) are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollinger in view of Wesley (US 2,378,610). Hollinger discloses a locknut and method comprising a body (11) having a threaded bore (14) with its length about equal to its diameter and an aperture (16) formed at the top end of the body including a plurality of forged splines elements (19') extending form a top surface of the body to an actuating wall (15) which is provided at an angle relative thereto. The splines having an engagement edge with adjacent splines separated by a void. A deformable locking member (17) having an inner surface larger than the threaded bore and an outer surface engaged by the splines (column 3, lines 46-51) which inherently would include the engagement edge. The volume of the deformable locking member being greater than that of the aperture such that as the nut is tightened

on a threaded rod, the deformable member is forced to flow against the threaded rod and an engaging surface (Figs. 5 and 6) which would provide both a sealing and a protection against loosening such as would be caused by vibration. At the nut body is further tightened or backed off the threaded rod the forces applied against the deformable member increase and reduce respectively. Hollinger is not specific on how the splines are formed. Wesley discloses locknut including a plurality of splines (17) which as formed by a forging operation (see Fig. 5). At the time the invention was made, it would have been obvious for one of ordinary skill in the art to make the splines in Hollinger by a forging operation as disclosed in Wesley because Wesley discloses an efficient method of making a locknut as described therein. The efficient method including the forging as disclosed would be an economical method of making the locknuts. The specific dimension would have been recognized depending upon the particular application of the nut since it is well known to provide nuts of varying sizes depending upon its intended use.

Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollinger as applied to claims 1 and 7 above, and further in view of Heighberger (US 3,938,571) and/or Hollinger in view of Wesley. Heighberger is relied upon for the material of the deformable member. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to make the deformable member of Hollinger out of polytetrafluorethylene as disclosed in Heighberger for its excellent quality of elastic memory as described therein.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim1-13 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 10/298,119. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant invention are claiming the same subject matter as the 10/298,119 application only broader.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

In Response to Applicant's Remarks

Applicant argues that Hollinger does not disclose the length of the threaded body being about equal to its diameter. In response, the examiner disagrees. Although,

Hollinger does not specifically describe the length of the threaded body about equal to its diameter the drawings clearly show the relative dimensions particularly when the requirement is to be merely "*about* equal" [emphasis added]. Looking at Fig. 2 in Hollinger it can be see the length of the threaded portion is about equal its length. Applicant is reminded that the drawing can be used as a reference for what they show[1].

Applicant next argues that Hollinger does not disclose the splines being formed by forging. While the examiner agrees that forging is not described in Hollinger, the forging is a product-by-process limitation wherein it is only the final product considered for patent[2]. The prior argument not withstanding, forging is a well know process for forming fasteners and to expedite this application, the reference to Wesley was added to show the forging operation so as to simplify the issues.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

[1] In re Mraz, 173 USPQ 25 (CCPA 1972).

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Flemming Saether whose telephone number is 703-308-0182. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on 703-308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Flemming Saether
Primary Examiner
Art Unit 3679

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[2] In re Marosi, 218 USPQ 289 (Fed. Cir. 1983).